

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/687,461	10/16/2003	Yoshio Takada	B422-243	8871	
26272 7	11/08/2005		EXAM	INER	
COWAN LIEBOWITZ & LATMAN P.C. JOHN J TORRENTE 1133 AVE OF THE AMERICAS NEW YORK, NY 10036			PERKEY, W	PERKEY, WILLIAM B	
			ART UNIT	PAPER NUMBER	
			2851		
			DATE MAILED: 11/08/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	<b>U</b>	•			
	Application No.	Applicant(s)			
	10/687,461	TAKADA, YOSHIO			
Office Action Summary	Examiner	Art Unit			
	William B. Perkey	2851			
The MAILING DATE of this communication appe Period for Reply	ears on the cover sheet with the c	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period wince the reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tin ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
<ul> <li>1) Responsive to communication(s) filed on</li> <li>2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for allowan closed in accordance with the practice under Exercise.</li> </ul>	action is non-final. ce except for formal matters, pro				
Disposition of Claims					
4) ⊠ Claim(s) 1-4,7-11 and 14-18 is/are pending in the 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) 1-4,7-11 and 14-18 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or	n from consideration.				
Application Papers					
9) The specification is objected to by the Examiner 10) The drawing(s) filed on 16 October 2003 is/are:  Applicant may not request that any objection to the description of the description of the description of the correction of the description of the correction of the description of the descriptio	a)⊠ accepted or b)□ objected lrawing(s) be held in abeyance. See on is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) □ All b) □ Some * c) □ None of:  1. □ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)  ) Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

Application/Control Number: 10/687,461

Art Unit: 2851

### **DETAILED ACTION**

# Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1-4, 7-11 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged Prior Art disclosed in applicants Figs. 6A and 6B in view of Nakagishi (U.S. Patent No. 6,424,068 B2).

Prior Art Fig. 6B discloses a rotor 102; a first bearing 101a; and second bearing 104a. The lever 102 is connected to a not shown light quantity adjusting device. The Fig. 6 B also discloses a Hall element 118 to detect the position of the rotor. Fig. 6B shows the yoke 105 arranged in a position shifted in a thrust direction with respect to the magnet (see the paragraph bridging pages 2 and 3 of applicant's disclosure). A bias in the radial direction is described on page 6 lines 3-6 of applicant's disclosure. The first and second bearings are illustrated as formed in a bobbin formed by cases 101 and 104. Lines 10-15 on page 2 discloses an unillustrated coil wound about the periphery of the bobbin halves 101 and 104. The acknowledged prior art discloses the claimed invention, except for the first bearing having a tapered shape and the fitted and axis portion are in a relation of a line osculation. Nakagishi discloses a motor device for controlling a device that requires high stability. Tapered and semi-spherical bearings, some embodiments with biasing means for the bearings, are disclosed by Nakagishi to obtain high stability of undesired movements. Figs. 23 and 24 show a fitted and axis portion in a relation of

line osculation where the parts 101 and 103 in Fig. 23 come into contact and where the parts 105 and 101 come into contact in Fig. 24. It would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to substitute improved bearings and axial portions of shapes similar to parts 103, 101, 105, 115 in Figs. 23 and 24 of Nakagishi for the bearings and axial portions of the acknowledged prior art Fig. 6B, in order to obtain the desirable feature of improved stabilization of the light quantity adjusting means.

# Response to Arguments

2. Applicant argues that Nakagishi fails to teach or suggest a bobbin including a first case and a second case or a coil wound around the outer periphery of the bobbin to thereby fix the first case and second case. The examiner agrees. However, the written description of the acknowledged prior art Figs. 6A and 6B discloses that subject matter. Thus, applicant's observation of what Nakagishi fails to show is not persuasive.

Applicant also argues that Nakagishi does not teach or suggest a fitted portion of an axis portion which is fitted into a bearing formed as a tapered shape, nor a fitted portion of a first bearing into which an axis portion is fitted formed into a tapered shape. Applicant asserts that tapered axis portion 103 receives a pin, but is not fitted into a bearing and the axis portion 105 is fitted into a tapered pin, but is not fitted into a tapered bearing. The examiner assumes that applicant refers to Fig. 23 of Nakagishi. It does appear that the bearings in Fig. 23 is in the elements 103 and 104. However, applicant has ignored the teaching of Fig. 24 reversing the location of the parts wherein the bearing 115 is in the part 114. Other Figs., such as Fig. 26, shows both bearing parts 123 and 124 in the stator part as opposed to the rotor part. Nakagishi clearly teaches that the bearing part may be located in either the stator or rotor part. Thus,

applicant's observation of Nakagishi is not found persuasive. Furthermore, the primary reference itself, that is acknowledged prior art Figs. 6 A and 6B teaches the location of the bearings in the bobbin halves. Nakagishi is only relied on for the teaching of various shapes for the bearing and the pin it receives. Nakagishi is not relied on for a teaching to locate the bearings in the bobbin halves.

#### Conclusion

3. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **Telephone Numbers**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William B. Perkey, whose telephone number is (571) 272-2126. The examiner can normally be reached on Monday-Thursday 7:00am-5:30pm.

Art Unit: 2851

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William B. Perkey Primary Examiner Art Unit 2851

WBP:wbp